OmniGuard™ UPS Power Management Software

Version 1.4
20th March 2003

OmniGuard™ UPS Power Management Software

User Manual

P74265

OmniGuard™ UPS Power Management Software

1.0 Introduction.....3
2.0 Installation.....3
2.1 System Requirements.....3
2.2.1 Computer interface connection.....4
3.0 Installation Procedure for Windows Versions.....5
4.0 Starting OmniGuard™ services.....11
5.0 Useful Tips.....43
6.0 OmniGuard™ Software for Linux and Solaris Installation Procedure.....45
7.0 HP Openview Configuration for receiving Traps.....54
Recommended format setting: Received event $E. $# args: $*.....57
Configure the SNMP Configuration in HP.....58

OmniGuard™ UPS Power Management Software

1.0 Introduction

OmniGuard™ Power Management Software is a UPS environment control management application for Windows 95/98/ME, Windows NT, 2000, Linux and Solaris operating systems. OmniGuard™ Power Management Software monitors the UPS connected to the host system through a RS 232 serial cable with any remote system connected to this host through the Internet.

Through the system's web browser, the user can monitor and change the host system's IP, Date, and System Name. Also the provision for PPP configuration is provided through which the users in the remote system can connect/disconnect the dial-up connection. The software upgrade operation can be carried out from the remote system through the software upgrade option. These are the operations carried out in the host system/server where the UPS is connected physically.

The environment control screen displays the meter readings from the UPS. Logs are maintained for the UPS readings, and can later be viewed in a structured format. The duration in which the logs are recorded is user defined. The events are graphed for such parameters like Input voltage, Input frequency, Output Voltage, Output frequency and several other variables.

The user can configure the UPS for scheduled parameters like alarms, shutdown types, shutdown duration, restart duration etc. Specific and general schedules can be configured and monitored for all such events.

2.0 Installation

2.1 System Requirements

1. To use OmniGuard™ Power Management Software, your system must be running one of the following operating systems.

   - Windows 95/98/ME/Windows NT/2000™
   - Linux™
   - Solaris™

-Pentium Processor
- 64 MB RAM
- 10 GB Hard Disk

2. OmniGuard™ software requires one dedicated RS-232 serial port on your server, for communication with the UPS.

2.2 Installing the UPS

Please refer to the Belkin OmniGuard™ Rackmount UPS user manual.

2.2.1 Computer interface connection

Connect the interface cable to a 9-pin computer interface port on the rear side of the UPS. Connect the other end of the cable to the server that will be monitoring/controlling the UPS.

CAUTION! Connect the interface cable from the server to the 9-pin communication port on the rear panel of the UPS first, before set up the software.

CAUTION! It is an option for the installation of software, UPS works fine without the installation of the software.

3.0 Installation Procedure for Windows Versions

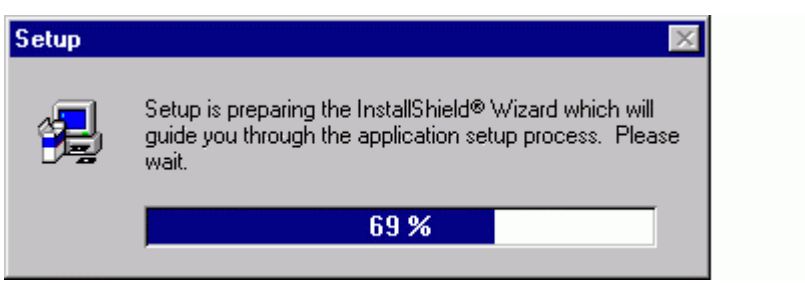
NOTE: Please check for the free drive space of at least 100MB, before proceeding with installation. Otherwise the installation will not be complete.

NOTE: Please login the OS as administrator to install the OmniGuard™ software.

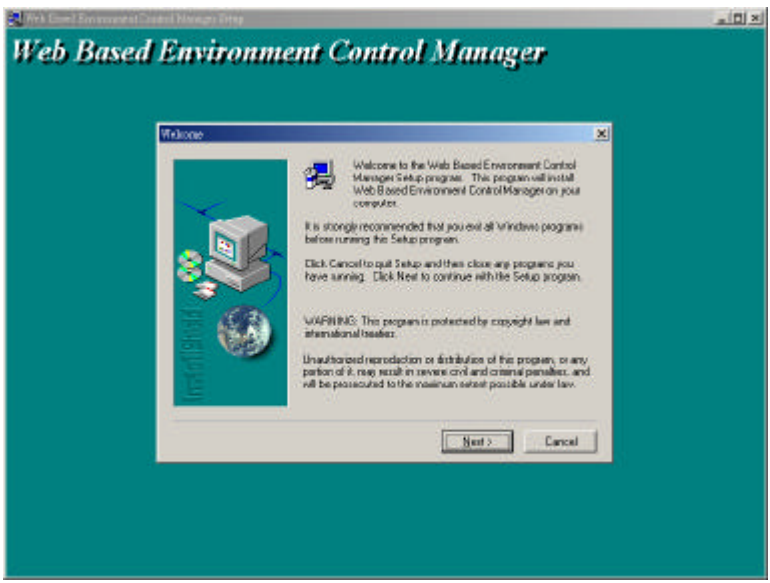
The following steps are required to install the Windows™ based software.

1. Insert the CD to the CD-RPM on the server and select the install OmniGuard™ software for Windows

You will get a Setup progress bar as seen below


Setup
Setup is preparing the InstallShield® Wizard which will guide you through the application setup process. Please wait.
69 %

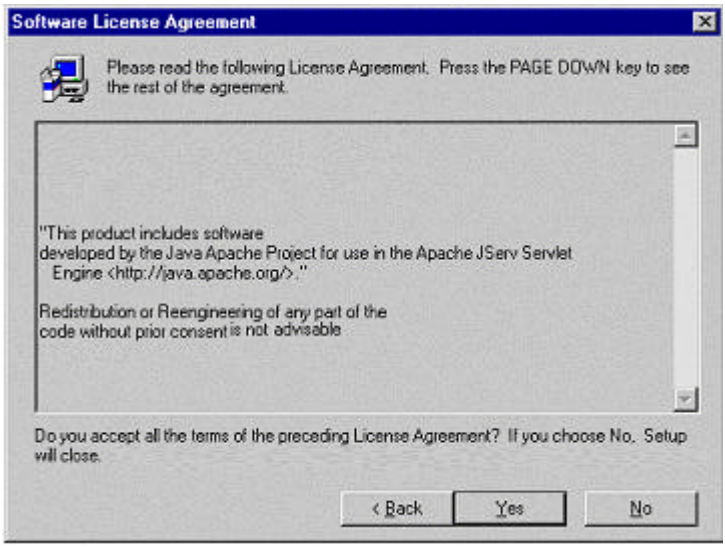
After that, you will see a **Welcome Screen**.


Web Based Environment Control Manager
Welcome
Welcome to the Web Based Environment Control Manager Setup program. This program will install Web Based Environment Control Manager on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

Note: Click Cancel to Exit Setup, in case a stoppage is required.

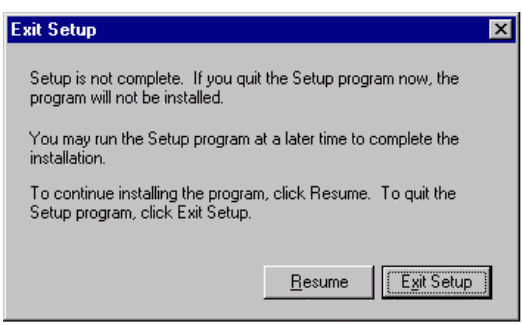
?? Clicking the Next button will take you to the Software License Agreement as seen below.

OmniGuard™ UPS Power Management Software


Software License Agreement
Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
"This product includes software
developed by the Java Apache Project for use in the Apache JServ Servlet
Engine <http://java.apache.org/>."
Redistribution or Reengineering of any part of the
code without prior consent is not advisable
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close.
< Back
Yes
No

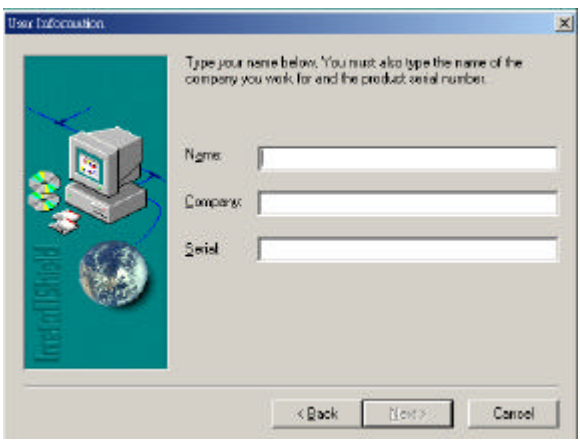
Read the license carefully and click on "**Yes"** to move to the next step.

Note: By not accepting the license, it will take you to Exit Setup Screen, to terminate the currently running setup. For example,

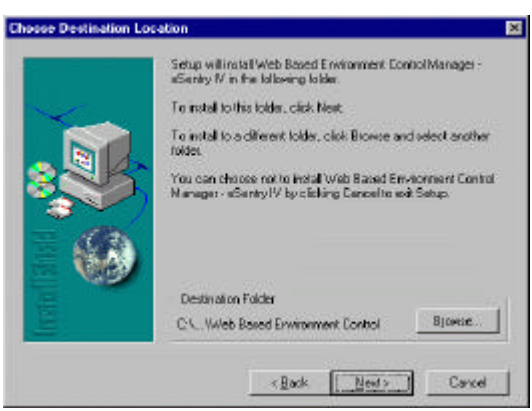

Exit Setup
Setup is not complete. If you quit the Setup program now, the program will not be installed.
You may run the Setup program at a later time to complete the installation.
To continue installing the program, click Resume. To quit the Setup program, click Exit Setup.
Resume
Exit Setup

After accepting the license, it will ask you to enter user information as seen below, please enter your name, company and Serial number and Press Next to proceed.

Note: You may find the serial number on the first page of the Hardware Manual or on the CD sleeve.


User Information
Type your name below. You must also type the name of the company you work for and the product serial number.
Name:
Company:
Serial:
InstallShield
< Back
Next >
Cancel

Now, choose the proper destination folder and Click Next.

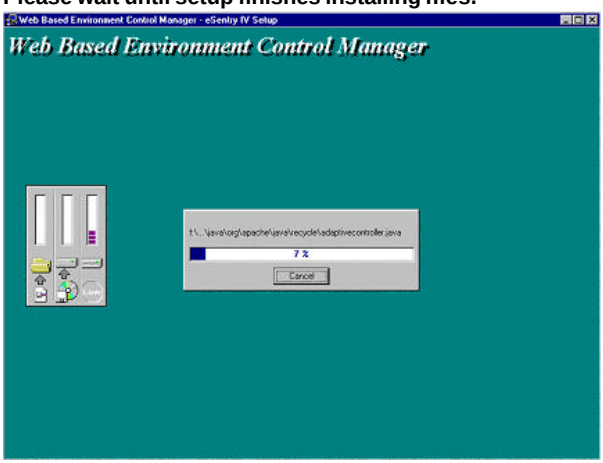

Choose Destination Location
Setup will install Web Based Environment Control Manager - eSentry IV in the following folder.
To install to this folder, click Next.
To install to a different folder, click Browse and select another folder.
You can choose not to install Web Based Environment Control Manager - eSentry IV by clicking Cancel to exit Setup.
Destination Folder
C:\...\Web Based Environment Control
Browse...
InstallShield
< Back
Next >
Cancel

Select Program folder name, default is **Web Based Environment Control Manager**

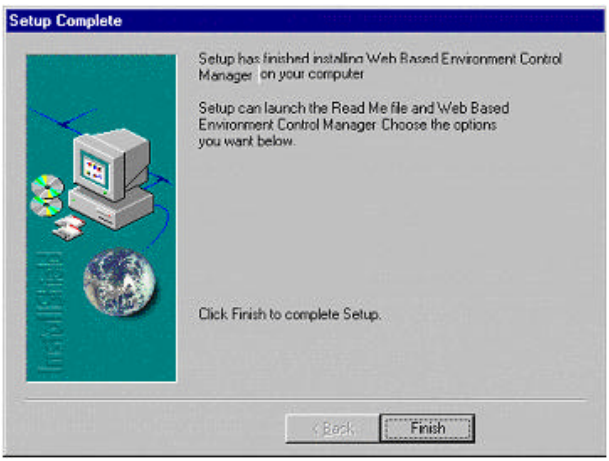
This shall add an icon with the named program above into a folder under Start Menu/Programs.

Clicking next will start the installation of the software, as per specified details. You will see a progress bar as show below.

Please wait until setup finishes installing files.

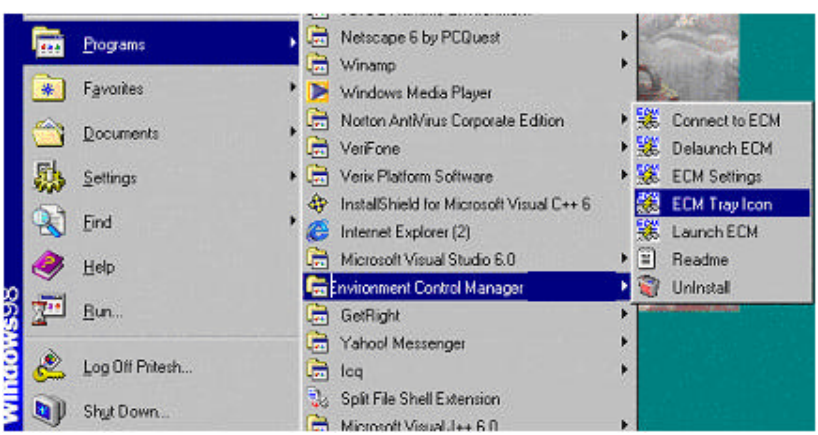


Once installation is over, you will see the screen below. Click Finish to end the installation.


Setup Complete
Setup has finished installing Web Based Environment Control Manager on your computer.
Setup can launch the Read Me file and Web Based Environment Control Manager. Choose the options you want below.
Click Finish to complete Setup.
< Back
Finish
InstallShield

.

Please check to ensure you are getting the icons under the Start Menu as below:



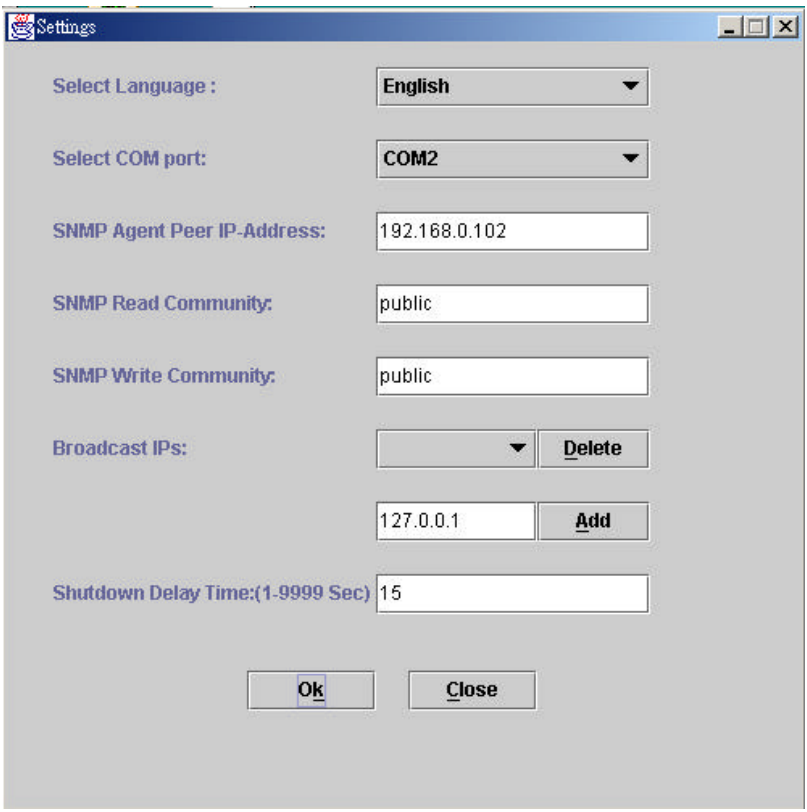
4.0 Starting OmniGuard™ services

The OmniGuard™ Software is installed in the host machine/server where the UPS is connected and the following services have to run in the system for the proper functionality of the software. Once the services are started, the device will be capable of being monitored from any remote machine through a web browser.

Step 1:

Select Settings Icon from startup menu that will get you to below screen. Change required data here as per your pc configuration, such as COM port where the UPS is connected and Press OK to save the data.

Note: Any changes in Settings below, must be followed by re-launching the application again to make changes take effect, otherwise select OK in COM port will not be altered.



The following parameters are configured via the above Settings screen.

?? Language selection

Multilanguage Feature:

This feature provides user to select different language as per the choices given in the ECM Settings Screen.

User needs to configure ECM Setting screen, by selecting proper language at installation time.

In case user needs to change the language setting, after installation, he needs to re-launch the ECM.

Points to be done manually for Multilanguage to work

Copying required language fonts

For all windows OS, copyfonts in to respected fonts directory for that OS

1. Say for Win NT, copy fonts into Winnt/Fonts directory
2. For Red Hat 8 Linux, copy fonts to /usr/X1186/lib/X11/fonts
3. For Solaris Intel 8, copy fonts to /usr/openwin/lib/X11/fonts

OmniGuard™ software is structured this way for multi language feature:

1. In Windows OS: Program Files/Web Based Environment Control Manager/Apache Group/Apache/Language
2. In Red Hat 8 Linux OS: /usr/local/apache/Language
3. In Solaris Intel 8 OS: /usr/local/apache/Language

The following parameters are configured via the above Settings screen.

?? COM port of UPS

NOTE: Please make sure which com port that server using to connect com port on the UPS.

?? SNMP Agent Peer IP Address: Indicate that server IP address.
?? SNMP Read Community
?? SNMP Write Community
?? Broadcast IP Address (for all clients that want to broadcast messages and set the shutdown messages, these changes need to be done here, and it will be amended in the list.

CAUTION! The OmniGuard™ broadcast function must be enabled in the same time. Then the shutdown message just can be sent out to the client station. Please check the "Broadcast" page in the manual to enable this function.

?? Shutdown Delay Time: When AC fails, the PC client shutdowns delay time.

Step 2:

Once the initial settings are done, you can launch the application.

Select the Launch Application option that will start the SNMP service and establishes the connection between the UPS and the system, also start other required programs like "Apache server". You shall see minimized DOS prompts to check that all applications are started.

Broadcast receiver
Sub Manager
Apache Web Server

NOTE! When launching first time, features in the Pop-Up Setting Screen will be added. So if any user forgets to open the Settings Screen, changes can be made here for required parameters. This screen will be launched the very first time, there after it will not be launched.

Close the screen, if settings are already established.

NOTE! For Windows 2000™, please stop the Windows' SNMP service, by going to below pathway. Go to control panel/administrative tool/services and select SNMP service and Stop the service, before launching the above

application, otherwise our SNMP agent and the Windows' SNMP service will conflict as they try to utilize the same port.

Step 3:

Now you can open the browser and set the host system's IP for viewing, monitoring and control of the UPS functions and details of the OmniGuard™ Power Management Software.

Step 4:

When you want to close the OmniGuard™ software, you may just click the "De-launch ECM".
This feature is available under both the Start Menu and the Tray Icon option.

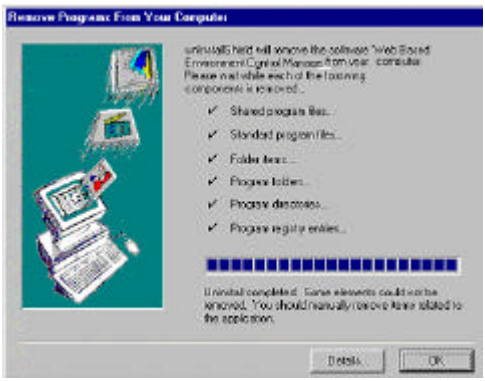
Uninstall OmniGuard™ Software:

Select the UnInstall option from the program menu to remove all the installed files and registry settings.

Note: Please close all the running applications before un-installing the OmniGuard™ software.

You will see the screen below, press "ok" to end the un-installation process.

OmniGuard™ UPS Power Management Software



Learning to use OmniGuard™ Software:

With the successful installation of the software and the startup of all the specified services, the browser will open with the host system's IP, and the following Login Screen will be displayed.

Login Screen:

OmniGuard™ UPS Power Management Software

Enter authorized login name and password here, to proceed further. After that you will see screen below if UPS is connected to the serial port.

NOTE! Both of the default login ID and Password are "**admin**"

OmniGuard™ UPS Power Management Software

Web Configuration

It consists of 3 categories.

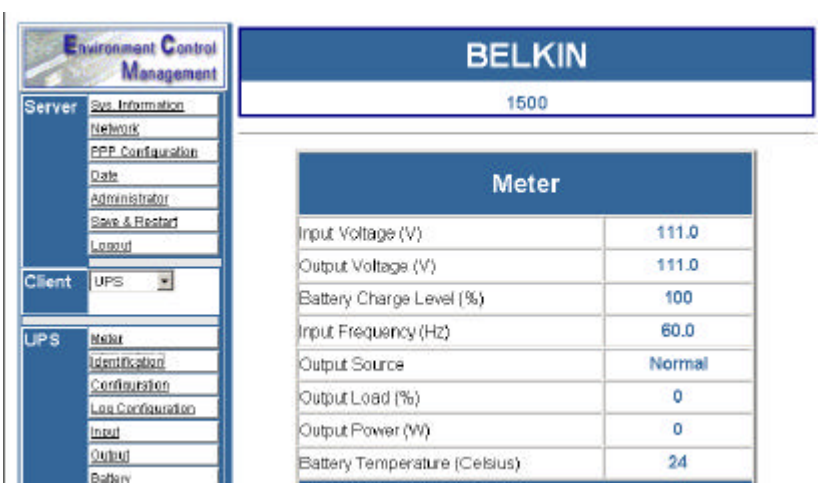
1. Server: Including the general network information about the server which installed the OmniGuard™ Software.

Sys. Information	User can set the information to support MIB II to define the System Group.
Network	Show the Server network information.
PPP Configuration	Show the Server Dial-up information.
Date	Show server date.
Administrator	Set the administrator's login name and password.
Save & Restart	Restart the server.
Logout	Close the browser.

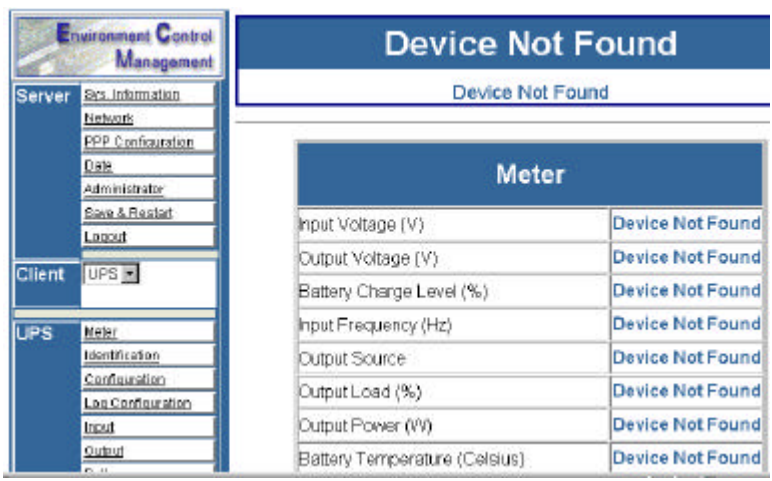
2. Client: Show the device type.
3. UPS: Including all detail information about OmniGuard™ UPS.

Meter

The UPS input and output information.



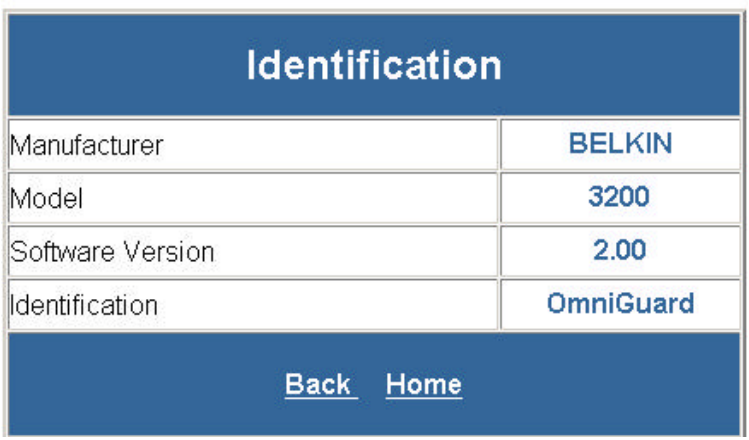
If the UPS is not connected physically to the COM port, then you will see the screen below showing the Device Not Found message.



The input voltage, Output Voltage, Battery charge level, Input frequency, Output Source, Output Load, Output power and the battery Temperature are displayed. These are information details, which are returned by the UPS. The values displayed ensure the proper connection is being established between the UPS and the host system. The details are logged in the data log.

Identification

The UPS identification details like manufacturer, model, software version and the Identification are displayed below.

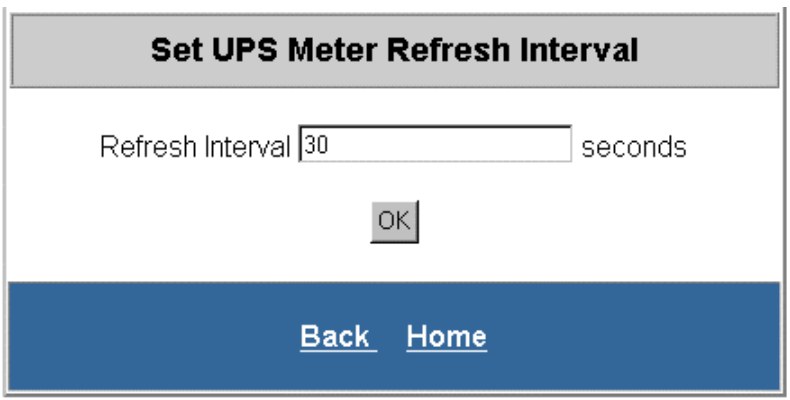


Configuration

The configuration details are read from the UPS and displayed. Input/Output Voltage, frequency, Power, batter installed date, auto restart, etc. Parameters are displayed with live values from the UPS.

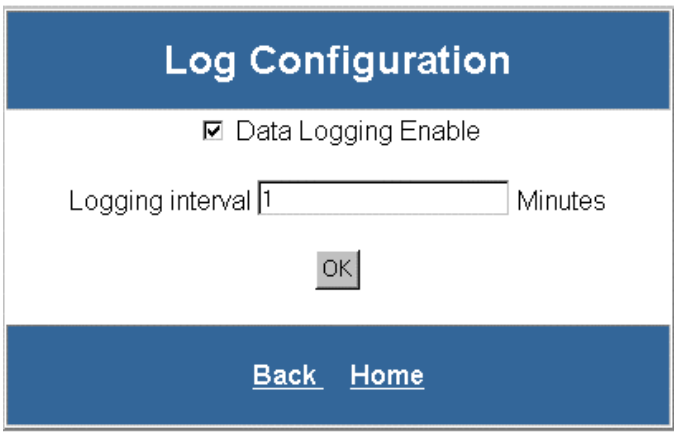
Configuration	
Nominal Input Voltage (V)	8.8
Nominal Input Frequency (Hz)	50.0
Nominal Output Voltage (V)	235
Nominal Output Frequency (Hz)	50.0
Nominal Volt-Amp Rating	1100
Nominal Output Power (W)	660
Nominal Low Battery Time (Min)	2
Audible Alarm	Enabled
Low Voltage Transfer Point	154
Battery Installed Date(MM/DD/YYYY)	04/26/2002
Nominal Battery Life(Day)	10
Shutdown Type	UPS System
Auto Restart	Enable

The meter refresh interval is set in seconds. This time shall be set, for how frequently a user wants to refresh the UPS/meter data on this page. Say for example, if it is set to five seconds, every five seconds the meter page will be refreshed, and the latest data shall be updated from the UPS to the Monitoring page.



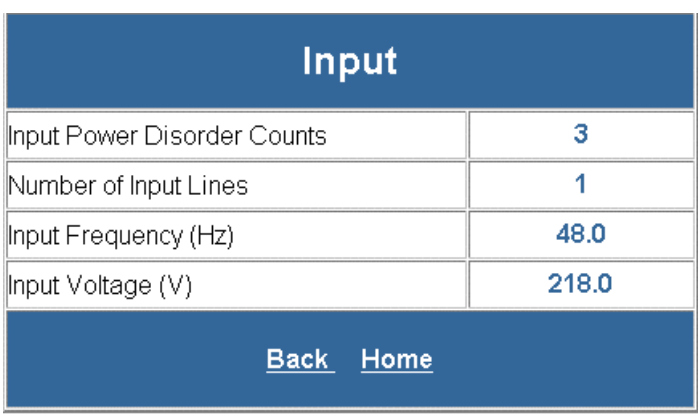
Log Configuration

The data-logging interval is specified here in minutes. Also the data-logging feature can be enabled or disabled with the check box option provided in the menu below.



Input

Details regarding the Input to the UPS like Input power, Disorder counts, Number of Input Lines, Input Frequency and Input Voltage are displayed here.



Output

The UPS output details like Output source, Output number lines, Output voltage; Output current, Output Power and Output Load are displayed here.

CAUTION: Output current, power and load value will be visible only when an actual load is connected to UPS input.

Output	
Output Source	Normal
Output Num Lines	1
Output Voltage (V)	216.0
Output Current (A)	0
Output Power (W)	0
Output Load (%)	0
Back Home	

Battery

The current battery details like Status, Charge, Estimated runtime, Battery charge level, Battery voltage, Battery temperature etc are displayed here.

Battery	
Battery Condition	GOOD
Battery Status	Battery OK
Battery Charge	Floating
Estimated Run Time	335
Battery Charge Level (%)	88
Battery Voltage (V)	26.6
Battery Temperature (Celsius)	28

Back Home

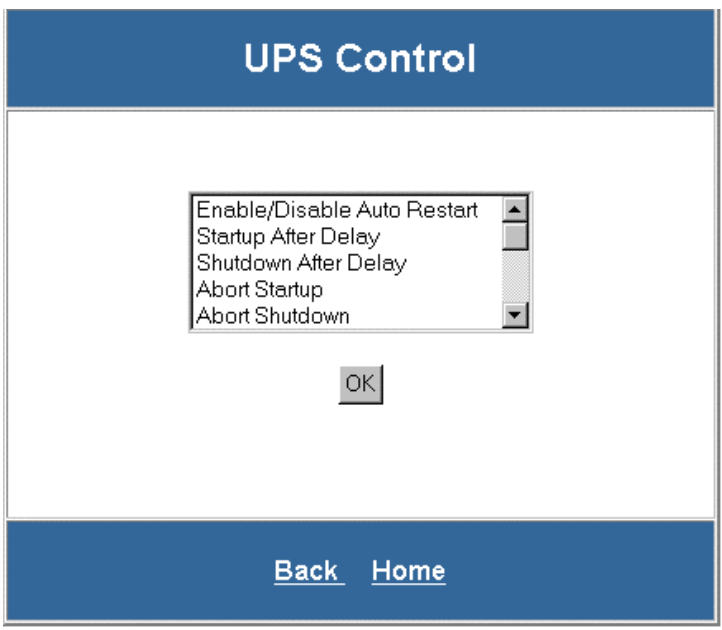
Alarm

The current alarm setting details that are supported by the UPS are displayed here.

Alarm	
Input Bad	Normal
Overload	Not Overloaded
Output Off	Output ON
Charger Failure	Normal
Genaral Failure	Normal
On Battery	Not On Battery
Low Battery	Not Low Battery
Depleted Battery	Not Depleted Battery
Bad Battery	Not Bad
Shutdown Pending	No Shutdown Pending
Test Results Summary	Test Passed

Control

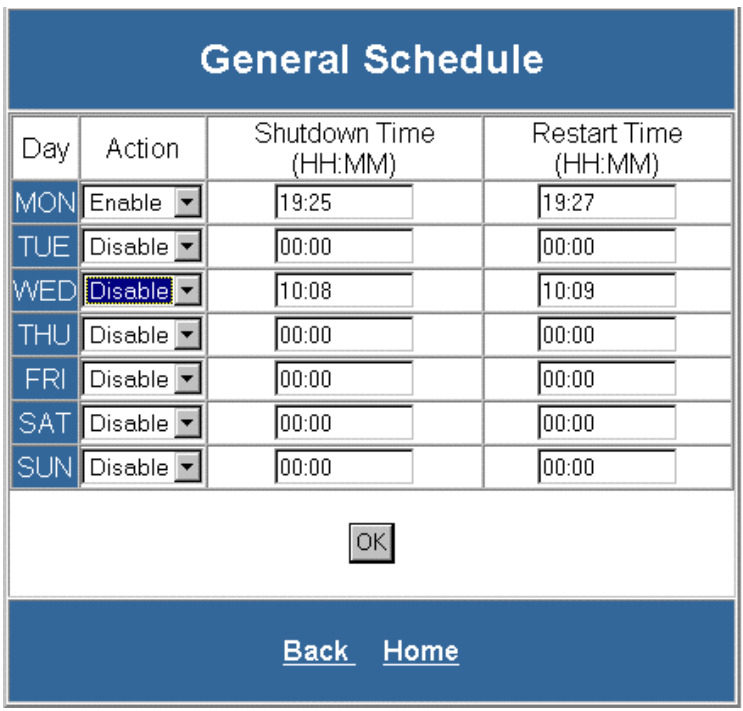
The control page provides the interface for controlling various operations provided by the UPS. You can control shutdown, restart, and auto restart and abort shutdown/startup. With the shutdown and startup functions, the interval in which the UPS will shutdown and restart can also be specified.



Note: Set Low Voltage Transfer. This control option has been disabled for OmniGuard™ UPS.

General Schedule

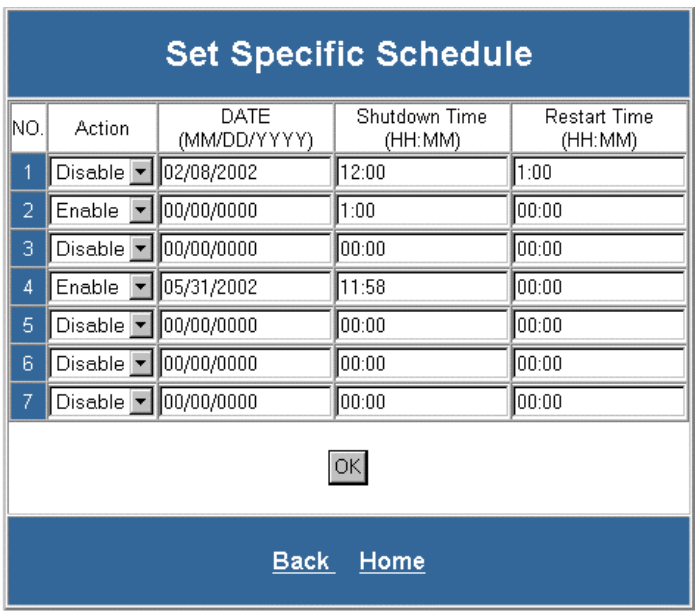
With the general schedule option, the shutdown and restart time are specified for a day. This functionality will work only when an Action is selected as “Enabled”.



Once ok is selected, the above event is scheduled as per the set date and time, and shall be activated at this particular time only.

Specific Schedule

The specific schedule sets the shutdown and restart time for specific dates. This functionality will work only when an Action is selected as “Enabled”.



Set Specific Schedule

NO.	Action	DATE (MM/DD/YYYY)	Shutdown Time (HH:MM)	Restart Time (HH:MM)
1	Disable	02/08/2002	12:00	1:00
2	Enable	00/00/0000	1:00	00:00
3	Disable	00/00/0000	00:00	00:00
4	Enable	05/31/2002	11:58	00:00
5	Disable	00/00/0000	00:00	00:00
6	Disable	00/00/0000	00:00	00:00
7	Disable	00/00/0000	00:00	00:00

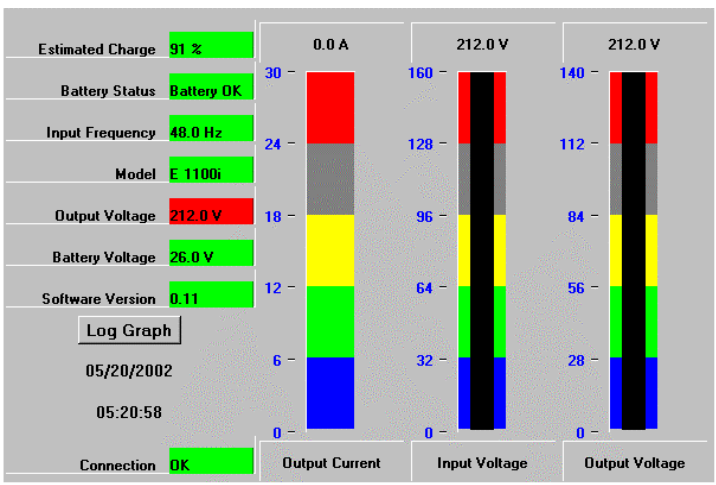
OK

Back Home

Once OK is pressed, the above event is scheduled as per the set date and time, and shall be activated at this particular time only.

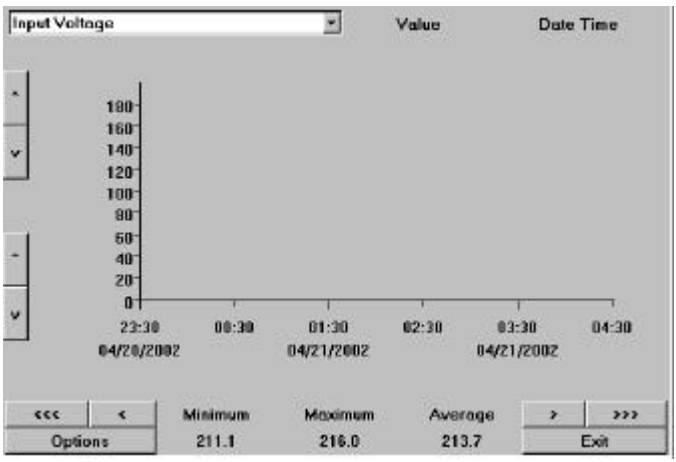
View Graphic

The View Graphic page displays the current values pertaining to the UPS. These values are configurable, and display the values indicated by the UPS.

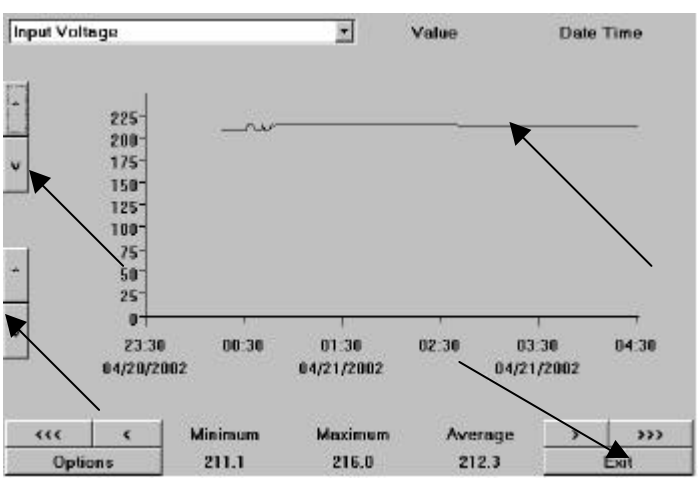


CAUTION! The very first time, you click View Log Graph, Status of Connection it will show Failure as default, indicating that no connection has been established. Please wait for few seconds, 15-20 seconds, until Connection status becomes OK from Failure.

Click on **Log Graph** button, will take you to the below screen.

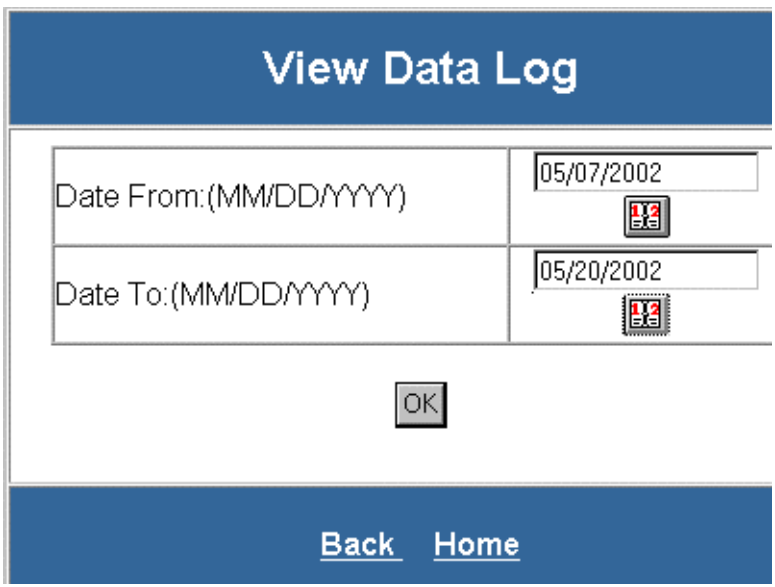


After adjusting the axis dates with the left and bottom corner option arrows shown below, you will get a graph like the one below. Options are highlighted with arrow markings.



View Data Log

The data from the UPS, which is captured and logged, is displayed with this menu.



After clicking ok, you will get actual data log as shown below. It is shown in two parts, due to the screen size.

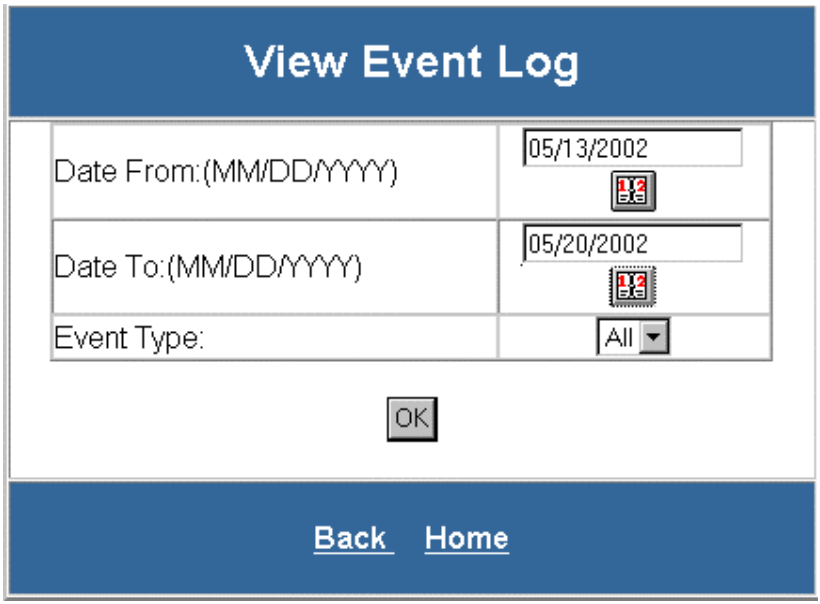
OmniGuard™ UPS Power Management Software

Page 1 / 12

DATE	TIME	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT SOURCE	OUTPUT LOAD	OUTPUT CURRENT	OUTPUT POWER	INPUT FREQUENCY	BATTERY VOLTAGE
5/20/02	16:02	216.0	216.0	Normal	0	0	0	48.0	25.6
5/20/02	16:03	216.0	216.0	Normal	0	0	0	48.0	25.6
5/20/02	16:04	216.0	216.0	Normal	0	0	0	48.0	25.6
5/20/02	16:05	216.0	216.0	Normal	0	0	0	48.0	25.6
5/20/02	16:06	214.0	214.0	Normal	0	0	0	48.0	25.8
5/20/02	16:07	216.0	216.0	Normal	0	0	0	48.0	25.6
5/20/02	16:08	214.0	214.0	Normal	0	0	0	48.0	25.6
5/20/02	16:09	216.0	216.0	Normal	0	0	0	48.0	25.8
5/20/02	16:10	214.0	214.0	Normal	0	0	0	48.0	25.6

ESTIMATED CHARGE	ESTIMATED MINUTES	TEMPRATURE	BATTERY CHARGE	BATTERY CONDITION	BATTERY STATUS
76	291	29	Charging	GOOD	Battery OK
76	291	29	Charging	GOOD	Battery OK
76	291	29	Charging	GOOD	Battery OK
76	291	29	Charging	GOOD	Battery OK
76	291	28	Charging	GOOD	Battery OK
76	291	28	Charging	GOOD	Battery OK
76	291	28	Charging	GOOD	Battery OK
78	291	28	Charging	GOOD	Battery OK
78	291	28	Charging	GOOD	Battery OK

View Data Log

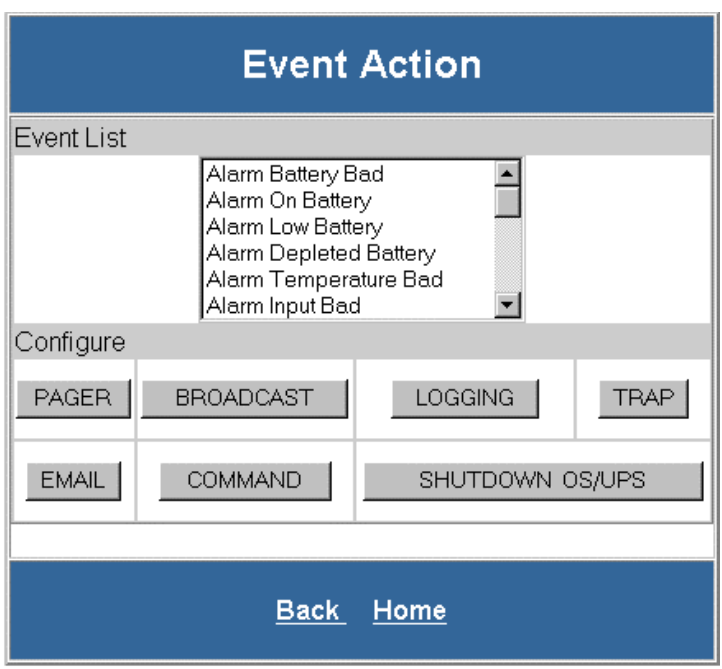


After Ok is selected, this view will be displayed as seen below …

Event Action

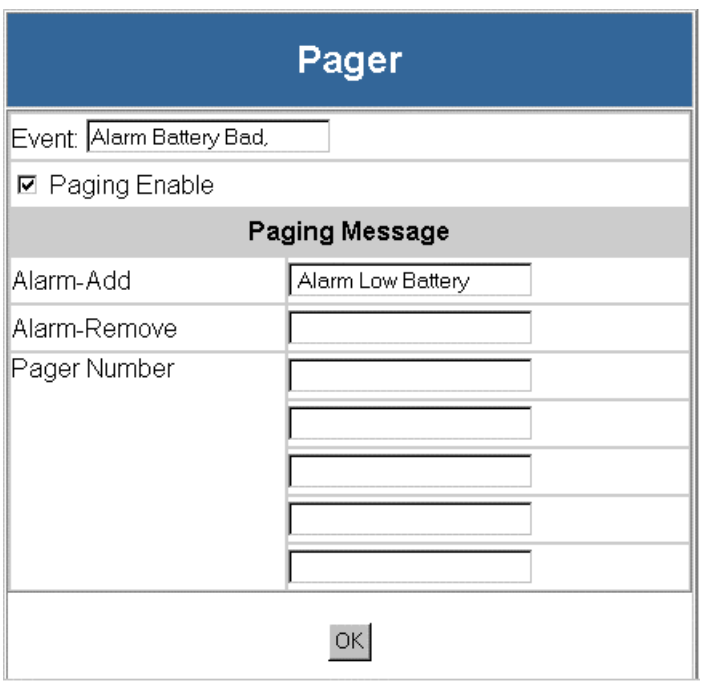
The various events in the UPS can be configured through this option. A pager /broadcast /email can be sent if an alarm has occurred.
Under the View Event Action option, there are many options that can be configured, as per the requirements of the end user.

CAUTION! All event configurations are in the unchecked status initially.



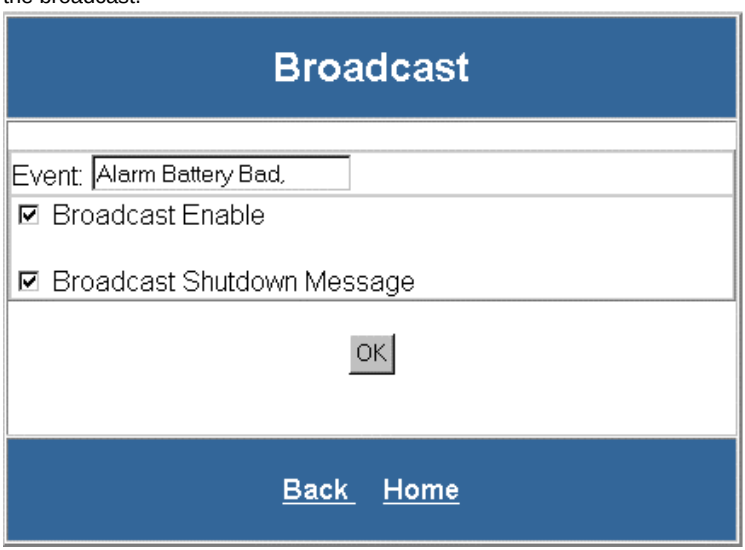
Pager Screen

Options shown with a check are enabled. This must be done for certain events to take place such as the paging feature.

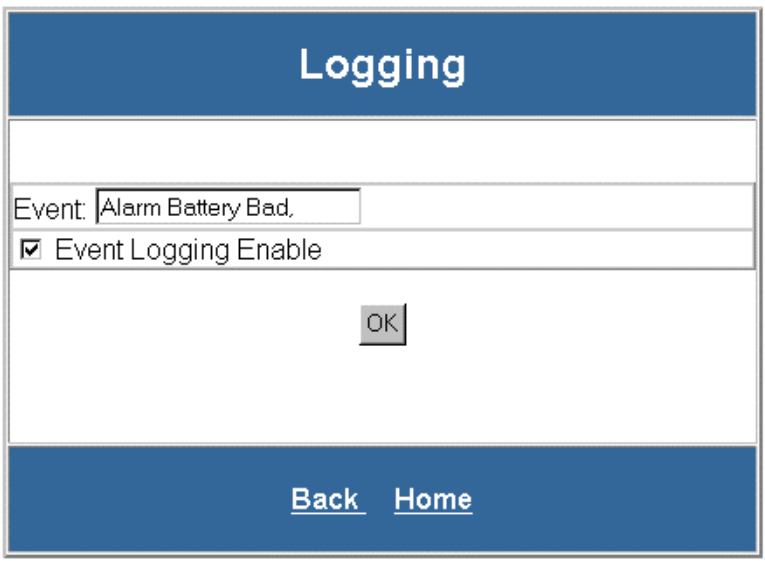


Broadcast Screen

If the below options are enabled, and the client IP Addresses are added using the Settings Screen shown earlier, it will send broadcast messages to all clients configured to receive the broadcast.

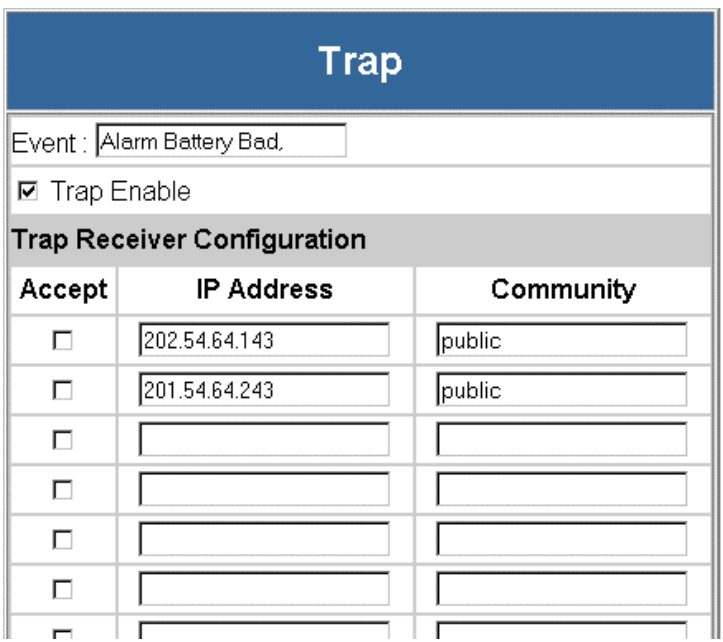


Logging Screen



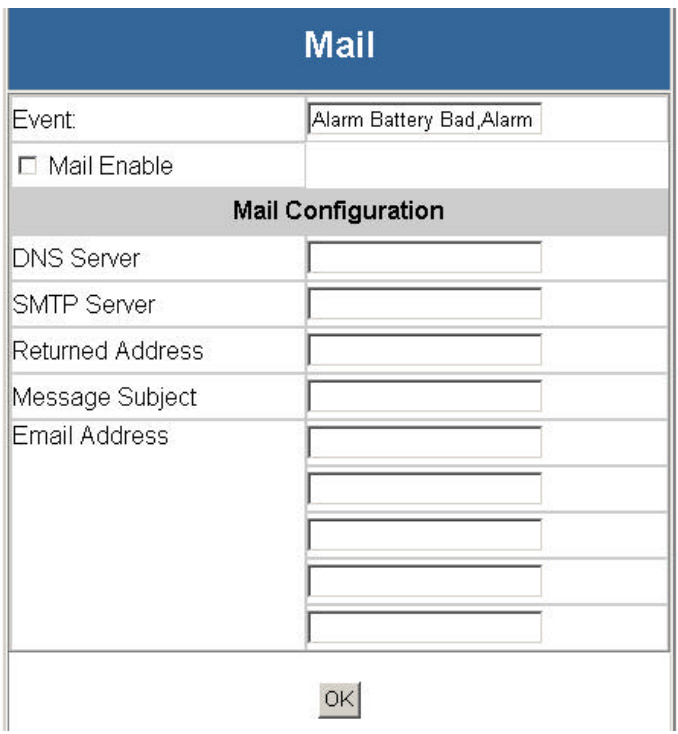
Trap Screen

Please specify the IP Addresses of Managers that are receiving traps. Trap Enable must be clicked to have traps received by managers.

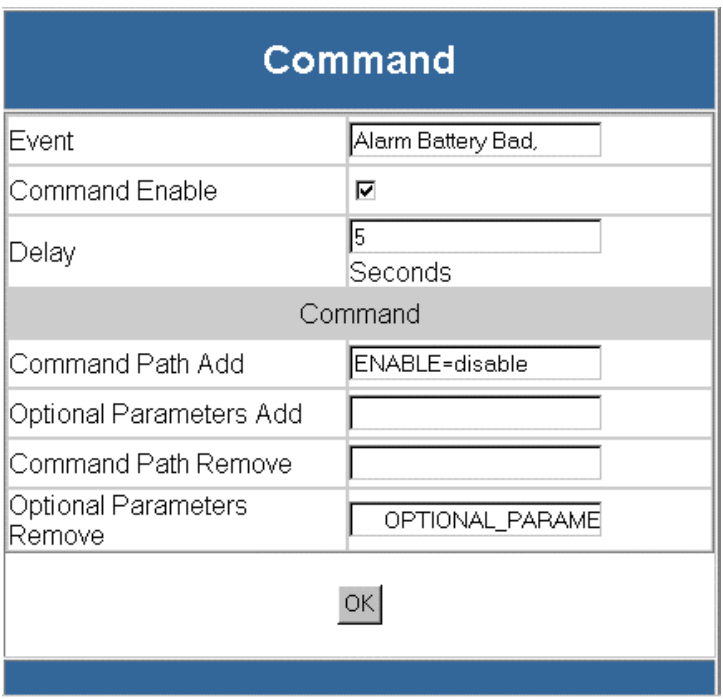


Email Screen

Email messages will be sent as per configuration, when one of the events occurs in the configured event list.

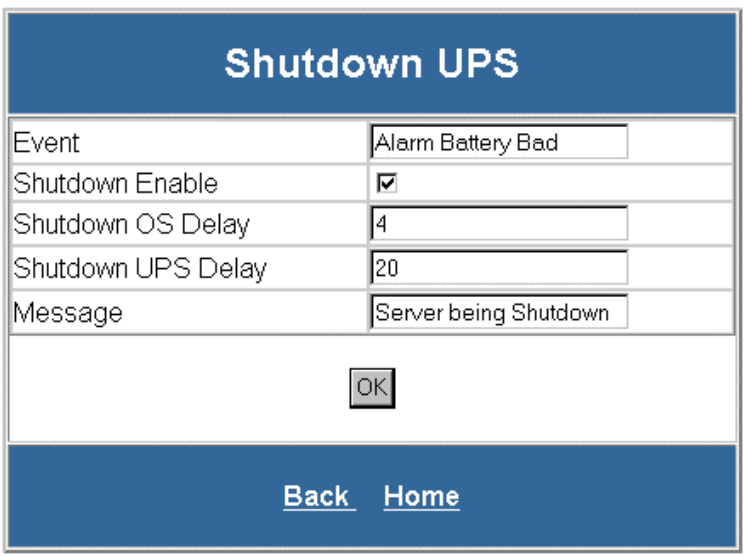


Command Screen



Shutdown OS/UPS

This option must be enabled to make the shutdown feature active.



5.0 Useful Tips

1. If you receive the **Device Not Found** message even though the device is actually connected to COM port,

   Please check,

   - ?? Settings screen COM Port is correct
   - ?? Check COM port is working and not used by another application
   - ?? Check our DOS prompt, process for agent process as below

The above screen must detect the UPS on the stated COM Port in order to receive the message, UPS Found.
From here you can also confirm the detection of the UPS.

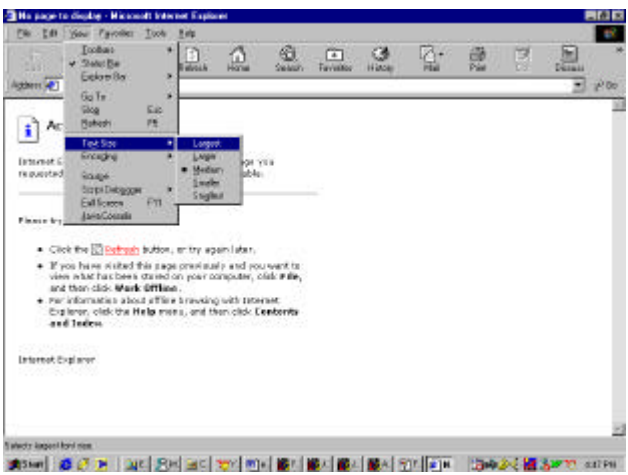
   - ?? If all Settings and physical connections are ok, try restarting the PC/server and check it again.

2. Any time changes are made in the COM Port, while running the application, please be sure to stop all applications and re-launch application again to make the changes effective.

3. If when you start the browser, you are not getting the login screen, please ensure the following

   ?? Check browser options and check that your PC/server's IP address is capable of using any Internet connection.
   ?? Check that all required applications are started properly without any error displayed.

4. Under the browser, as shown below, Text Size options will change size fonts, in screens.



You can use the smallest font, to avoid changes in alignment, but that will make the fonts very small and not easily readable by the user.

5. For Windows NT / 2000 PC:

   On occasion you may find that you are not able to open the login page, or you may get an error in one of the DOS Prompt windows that the communication port is already in use.

   This is due to the innate Apache service in the OS. Please go to the Services option under the Control Panel, and check that the Apache Server is running. If so, then stop it and check the manual to set it, so it will not start automatically

6.0 OmniGuard™ Software for Linux and Solaris Installation Procedure

Note: Below installation procedure only tested on RED HAT LINUX VERSION 8.

Permissions are also set in scripts, during installation of the software.

Ensure following are in place, in one common directory.

Third party software needed

1. apache_1.3.26-i686-whatever-linux22.tar.gz
2. ApacheJServ-1.1.2.tar.gz
3. jsdk20-solaris2-sparc.tar.Z
4. jdk1.2.2.tar.gz

OmniGuard™ software Linux Releases

1. ECM_XXXXX2003_LINUX.tar – This is the main release. XXXXX- Software release date.
2. In CD ROM that contains all the scripts, needed to run the software on linux

Scripts included in ECM_SCRIPTS_14FEB2003_LINUX.tar are as follows

1) ApacheStart – This script is used to start apache web server.
2) ApacheStop – This script is meant for stopping apache server manually.
3) BroadCastStart – This script will be used during launching of the software. It will start the broadcast receiver. Start in different terminal

4) configureECM – This script shall be used for running the software Setting Screen. To configure com ports for device, changing the language settings etc.

Note: Copy script, where you copy all other files in your linux. Make sure Permissions are set correctly as below before running any script.

- Set permissions for script.
- chmod 777 configureECM
- Run script : ./configureECM

NOTE! USER SHOULD HAVE X-WINDOWS RUNNING / GRAPHICS ENVIRRONMENT MUST BE THERE LIKE KDE ...ON HIS LINUX PC.

5) InstallLinuxECM – To install OmniGuard™ software only, whenever there is an update release for any bug fixing and feature enhancement.
6) ECM_Install – This script is the base script for fresh installation of OmniGuard™ software on Linux, that will install, Apache, ApacheJserv, JDK, ECM software
7) ECM_Un_Install – To remove OmniGuard™ software, including apache server. This will delete all the directories used for ECM.
8) SnmpAgentStart – This script to be used for starting SNMP Agent. Start in different terminal
9) SubManagerStart – This script to be used for starting Sub Manager service. Start in different terminal.

CAUTION! Below instructions are manual ways of doing the installation. Not recommended, as we have given single script that does the entire job. The information below is to be considered only as a reference.

Installation on Linux with commands:

1) Install JDK:

Move JDK file to /usr/local/src

Command: mv jdk1.2.2 /usr/local/src

2) Install JSDK

Move jsdk20-solaris2-sparc_tar.Z file to /usr/local/src

Commands:

mv jsdk20-solaris2-sparc_tar.Z /usr/local/src
cd /usr/local/src
tar -zxvf jsdk20-solaris2-sparc_tar.Z

3) Install Apache
Move apache_1_3_26-i686-whatever-linux22_tar.tar file to /usr/local/src
Commands:
mv apache_1_3_26-i686-whatever-linux22_tar.tar /usr/local/src
cd /usr/local/src
Install Apache to /usr/local/apache

Commands:

```
tar -zxvf apache_1_3_26-i686-whatever-linux22_tar.tar
    cd apache_1.3.26
    Configure(with DSO support)
        ./configure \
        --prefix=/usr/local/apache \
        --enable-rule=SHARED_CORE \
        --enable-module=so
    make
    make install
/usr/local/apache/bin/apachectl start
```

4) Install JServ:

Move ApacheJServ-1.1.2.tar file to /usr/local/src
Commands:
mv ApacheJServ-1.1.2.tar /usr/local/src
cd /usr/local/src
Install JServ to /usr/local/jserv
Commands:

```
cd /usr/local/src
    tar -xvf ApacheJServ-1.1.2.tar
    cd ApacheJServ-1.1.2
    Configure(DSO)
        ./configure \
        --prefix=/usr/local/jserv \
        --with-apxs=/usr/local/apache/bin/apxs \
        --with-jdk-home=/usr/local/jdk1.2.2 \
        --with-JSDK=/usr/local/JSDK2.0/lib/jsdk.jar \
        --disable-debugger

    make
    make install
```

Edit configuration files- DSO Installation

*** Edit /usr/local/apache/conf/httpd.conf**

Add line: LoadModule jserv_module libexec/mod_jserv.so

Add line: AddModule mod_jserv.c

Add line: include /usr/local/apache/conf/jserv/jserv.conf

*** Edit /usr/local/apache/conf/jserv/jserv.conf**

Addline:ApJServProperties

/usr/local/apache/conf/jserv/jserv.properties
Add line: ApJServLogFile /usr/local/apache/conf/jserv/mod_jserv.log
Add line: ApJServMount /servlets/servlets (Comment out other entries)

*** Edit /usr/local/apache/conf/jserv/jserv.properties**
Add line: zones=sevlets (Comment out other entries)

Addline:servlets.properties=/usr/local/apache/conf/jserv/servlets.properties (Comment out other entries)

Add line: /usr/local/apache/conf/jserv/servlets.properties
Add line: respositories=/usr/local/apache/servlets

Execute the line.

cp /usr/local/apache/conf/jserv/zone.properties /usr/local/apache/conf/jserv/servlets.properties

Installation on linux with script:

Move the executable script Linux_install_WUPS to home directory .
Command: mv Linux_install_WUPS $HOME
Move ECM-21-11-2002.tar.gz files to home directory.
Command: mv ECM-21-11-2002.tar.gz $HOME
Move jsdk20-solaris2-sparc_tar.Z file to home directory.
Command: mv jsdk20-solaris2-sparc_tar.Z $HOME
Move apache_1_3_26-i686-whatever-linux22_tar.tar file to home directory.
Command: mv apache_1_3_26-i686-whatever-linux22_tar.tar $HOME
Run the script.
Command: Linux_install_WUPS

Installation on intel solaris with commands:

1) Install JSDK

Move jsdk20-solaris2-sparc_tar.Z file to /usr/local/src
Commands:
mv jsdk20-solaris2-sparc_tar.Z /usr/local/src
zcat jsdk20-solaris2-sparc_tar.Z | tar -xf -

3) Install Apache
Move apache_1_3_26-i86pc_sun_solaris2.280.tar.gz file to /usr/local/src
Commands:
mv apache_1_3_26-i86pc_sun_solaris2.280.tar.gz /usr/local/src
cd /usr/local/src
Install Apache to /usr/local/apache

Commands:
gunzip apache_1_3_26-i86pc_sun_solaris2.280.tar.gz
tar -xvf apache_1_3_26-i86pc_sun_solaris2.280.tar
cd apache_1.3.26
Configure(with DSO support)
**./configure **
**--prefix=/usr/local/apache **
--enable-shared=max

make
make install

4) Install JServ:

Move ApacheJServ-1.1.2.tar file to /usr/local/src
Command: mv ApacheJServ-1.1.2.tar /usr/local/src
Install JServ to /usr/local/jserv
Commands:
cd /usr/local/src
tar -xvf ApacheJServ-1.1.2.tar
cd ApacheJServ-1.1.2
Configure(DSO)
**./configure **
**--prefix=/usr/local/jserv **
**--with-apxs=/usr/local/apache/bin/apxs **
**--with-jdk-home=/usr/java1.2 **
**--with-JSDK=/usr/local/JSDK2.0/lib/jsdk.jar **
--disable-debugger

make
make install

Edit configuration files- DSO Installation
*** Edit /usr/local/apache/conf/httpd.conf**

Add line: LoadModule jserv_module libexec/mod_jserv.so
Add line: AddModule mod_jserv.c
Add line: include /usr/local/apache/conf/jserv/jserv.conf

*** Edit /usr/local/apache/conf/jserv/jserv.conf**
Add line: ApJServProperties /usr/local/apache/conf/jserv/jserv.properties
Add line: ApJServLogFile /usr/local/apache/conf/jserv/mod_jserv.log
Add line: ApJServMount /servlets/servlets (Comment out other entries)

*** Edit /usr/local/apache/conf/jserv/jserv.properties**
Add line: zones=sevlets (Comment out other entries)
Addline:servlets.properties=/usr/local/apache/conf/jserv/servlets.properties (Comment out other entries)

Execute the line.
cp /usr/local/apache/conf/jserv/zone.properties /usr/local/apache/conf/jserv/servlets.properties

Add line: /usr/local/apache/conf/jserv/servlets.properties
Add line: respositories=/usr/local/apache/servlets

Installation on intel Solaris with script:

Move the executable script Solaris_install_WUPS to home directory .
Command: mv Solaris_install_WUPS $HOME
Move ECM-21-11-2002.tar file to home directory.

Command: mv ECM-21-11-2002.tar $HOME
Move jsdk20-solaris2-sparc_tar.Z file to home directory.
Command: mv jsdk20-solaris2-sparc_tar.Z $HOME
Move apache_1_3_26-i86pc_sun_solaris2.280.tar.gz file to home directory.
Command: mv apache_1_3_26-i86pc_sun_solaris2.280.tar.gz $HOME
Run the script.
Command: Solaris_install_WUPS

Download Apache server from URL: http://apache.valueclick.com/dist/httpd/binaries/solaris

7.0 HP Openview Configuration for receiving Traps

Note: Version 6.31 is used during testing of compatibility tests for HP.

MIB Release Details:

1) Mm1628v5.mib – This is to be loaded for UPS

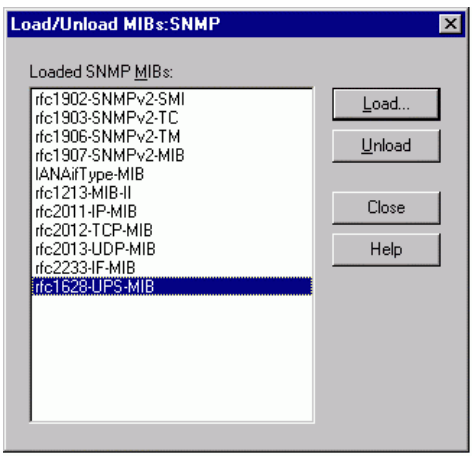
Load MIB specific to device:

Note 1:
1. Move any of ups MIB if already loaded till now. Unload it.
2. Open Event Configuration screen, delete all events under your ups MIB already loaded, and then remove Enterprise upsMIB.

Note 2:
All MIB developed for each device, are based on upsMIB. Because of this reason, it is must to remove first all events under upsMIB first, and then remove enterprise upsMIB itself. Save changes and unload loaded MIB, before proceeding for loading any other device MIB. Otherwise HP Openview will prompt the error message.

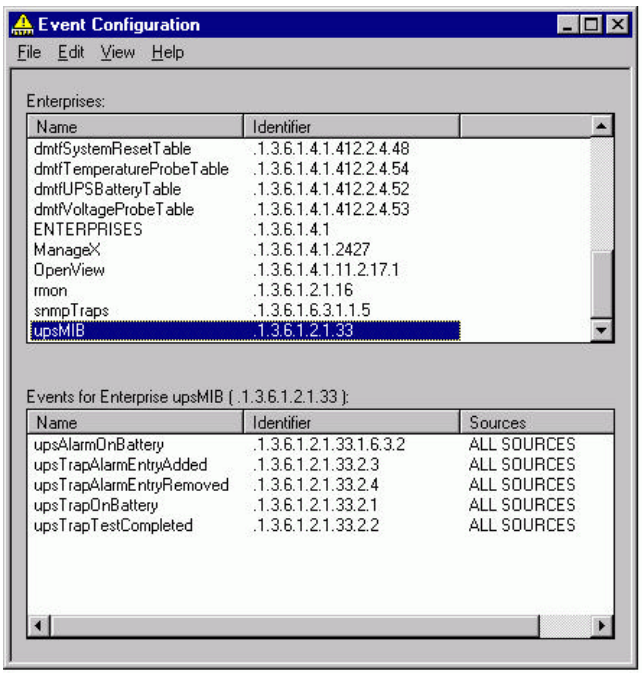
Steps to load MIB:

1. Load with the Load/Unload Mibs option



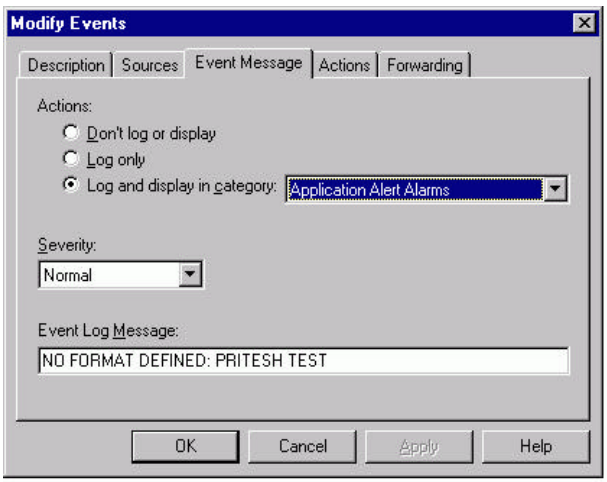
2. Open Event Configuration Menu

You will see upsMIB Enterprise in the enterprise list.



3 Configure each event as follows – Select event under upsMIB Enterprise.

4. Select event falling under upsMIB Enterprise, double click to modify it. See screen below



Note: Actions option is by default is Log only

1) Change Actions option as shown in screen, to log and display in category, Say as Application Alert Alarms

2) Change Event Log Message option, as per your convenience. This configured format in this option will be used to log your traps in Application Alert Alarms.

Recommended that you set below line in this option, to get proper formatted trap message in alarm window.

Replace NO FORMAT DEFINED in Event Configuration for all events with below value.

Recommended format setting: Received event $E. $# args: $*

3) Save Changes for event configuration, and close the screen

Note: Above step is must, without which event message in alarm window, will come as default message of HP, "NO FORMAT DEFINED" under Event Configuration for each event. By default, HP puts "NO FORMAT DEFINED".

- **HP Openview Configuration for MIB Browser support**

- Use SNMP MIB Browser option, to check MIB Control feature for each device.

Note: HP Openview, by default is sending the Get Next request, on selected node/variable in MIB Tree, say ups Input Frequency, you are trying to get the value, it actually gets next variable in the tree, and hence shows no values returned. Hence it is recommended to select parent node, and Start Query. If any configuration we find, to change this default behavior of sending Get Next request to Get Request, it will be informed to you.

Set the agent SNMP version

Use MSDOS prompt, after Network Node Manager is started. And give below command to set the ECM Agent SNMP version.

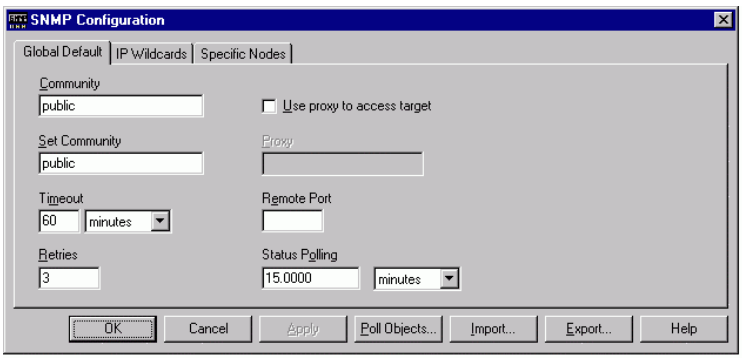
Command: **xnmsnmpconf -setV agent/Port 1**
e.g. **xnmsnmpconf -setV 172.5.25.27/161 1** OR
xnmsnmpconf –setV SystemName/161 1

Where 172.5.25.27 is the IP Address of the PC where ECM is installed or it can be System Name of PC and Port must be 161.

Configure the SNMP Configuration in HP

- 3 Set timeout value: 2 minute (not compulsory, can be any value)
- Set community to public in both the community fields
- Retries:
- Port: No need to set, it takes default 161

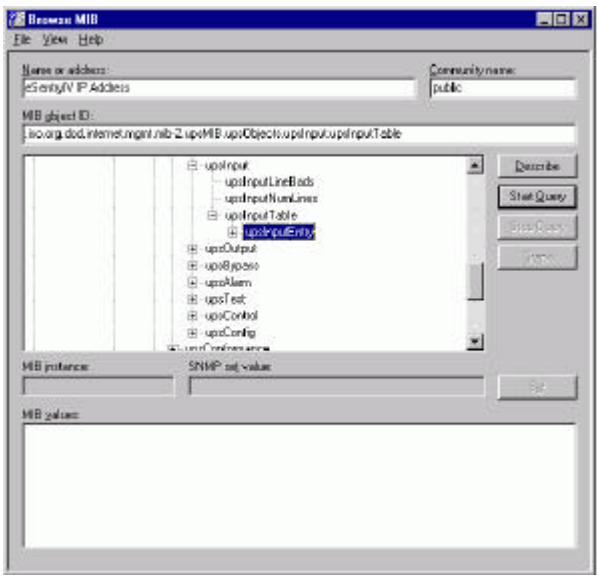
See below screen for ref.



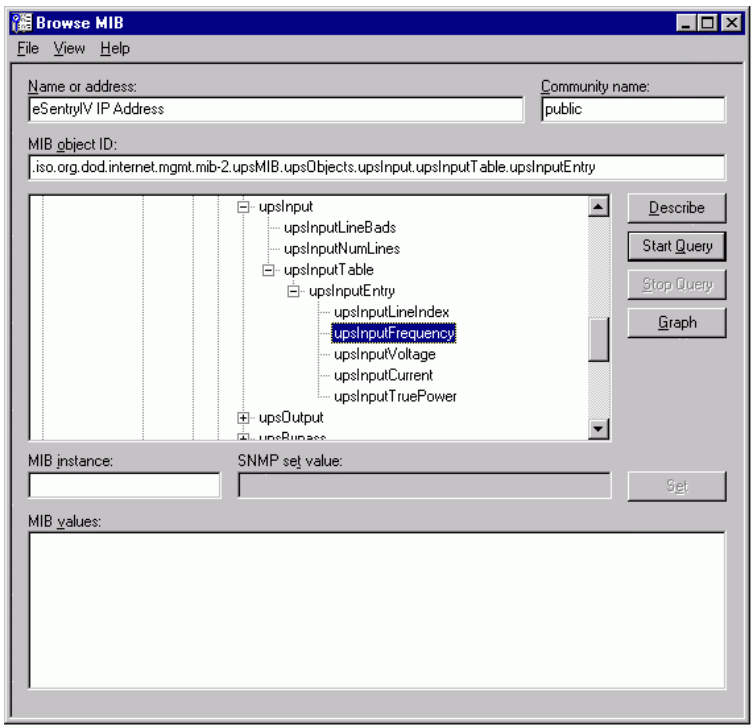
Correct selection of parent node as below screen.

This will get all child variables value in the MIB Values bottom window.

?? Set ECM IP Address and community to public, as shown.



Incorrect selection for specific variable watch: (This is due to default behavior of HP, sending Get Next request)



Note: If performance in terms of speed is poor, then there is a problem of DNS configuration or hosts file configuration in your PC where HP 6.31 NNM is installed. This is specific to HP network configuration problem. User is expected to know this as minimum for working with HP Openview

You can try adding all your nodes in operating systems hosts file, so that hosts will be resolved and performance will improve.